

What is claimed is:

1 1. A septic heater system for preventing a septic system from freeze-up wherein the
2 septic system includes a septic tank, drop boxes, connecting sewer pipe, a drainfield,
3 and one or more vertical access/cleanout pipes which rise from one or more portions of
4 the septic system to access ports at or above ground level, the heater system being
5 adapted for connection to one or more of the vertical access/cleanout pipes, the heater
6 system comprising:

7 a heater and fan system defining an output port for providing a flow of heated air
8 at the heater output port;

9 the heater output port being defined by a structure configured for coupling the
10 output port to the access/cleanout pipe; and

11 wherein the heater and fan system, when activated to provide the flow of heated
12 air and when the heated-air output port is coupled to one or more of the
13 access/cleanout pipes, prevents septic-system freeze-up by delivering the heated air
14 down the access/cleanout pipe to the septic system.
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1 2. The septic heater system of claim 1 wherein the output port structure is
2 configured for coupling the heated-air output port substantially at a top end of the
3 access/cleanout pipe via an access port.

1 3. The septic heater system of claim 1 wherein the output port structure comprises
2 a pipe configured for coupling the heated-air output port to the access/cleanout pipe.

1 4. The septic heater system of claim 1 wherein the heater system comprises a
2 weatherproof housing which covers the heater and fan system and which has a
3 removable cover for accessing the heater and fan system as well as related wiring and
4 controls.

1 5. The septic heater system of claim 4 wherein the related wiring and controls
2 include a thermostat for turning the heater and fan system on and off at appropriate

3 temperatures for maintaining the septic system in an unfrozen state.

1 6. The septic heater system of claim 1 wherein the heater and fan system
2 comprises an electrically-powered heater and fan having a power connection for
3 coupling the heater and fan system to an electric power source.

1 7. The septic heater system of claim 1 wherein a structural member of the
2 weatherproof housing defines an air intake opening to enable air to enter the housing
3 and flow through the heater and fan system and down the access/cleanout pipe to the
4 septic system.

1 8. The septic heater system of claim 1 wherein the air intake opening defined by the
2 structure is located in a position to help prevent debris from being sucked into the
3 weatherproof housing.

1 9. The septic heater system of claim 1 wherein:

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3 the weatherproof housing defines an air intake opening to enable air to enter the
4 housing such that, when the housing is coupled to the access/cleanout pipe, the air
5 entering the housing will flow through the heater and fan system and down the
6 access/cleanout pipe to the septic system;

7

8 the structural member of the weatherproof housing which defines the air intake
9 opening comprises a structural member located at the bottom of the housing; and

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11 the heated air output port of the housing is located at the bottom of the housing.

1 10. The septic heater system of claim 1 wherein the heater system comprises an
2 insulated connector pipe to couple the heated-air output port of the housing to the
3 access/cleanout pipe.

1 11. The septic system of claim 1 wherein the system is assembled, operational, and
2 coupled to the access/cleanout pipe.

1 12. The system of claim 12 wherein the system is in operation.

1 13. A septic heater system for preventing a septic system from freeze-up wherein the
2 septic system includes a septic tank, drop boxes, connecting sewer pipe, a drainfield,
3 and one or more vertical access/cleanout pipes which rise from one or more portions of
4 the septic system to access ports at or above ground level, the heater system being
5 adapted for connection to one or more of the vertical access/cleanout pipes, the system
6 comprising:

7
8 a weatherproof housing;

9
10 a heater-fan unit comprising a blower and heater, the heater-fan unit being
11 mountable in the housing;

12
13 a thermostat configured for electrical coupling to the heater-fan unit for turning
14 the heater and fan on and off at appropriate temperatures for maintaining the septic
15 system in an unfrozen state; and

16
17 the housing defining a heated-air output port mountable to the vertical
18 access/cleanout pipe;

19
20 wherein the system, when assembled and coupled to the access/cleanout pipe,
21 and when activated to provide the flow of heated air into the access/cleanout pipe,
22 prevents septic-system freeze-up by delivering the heated air down the access/cleanout
23 pipe to the septic system.

1 14. The septic heater system of claim 13 wherein the components of the heater
2 system are sold as a kit to be assembled by the installer.

1 15. The septic heater system of claim 13 wherein the system is sold substantially
2 assembled and substantially ready for installation on the access/cleanout pipe.

1 16. The septic heater system of claim 13 wherein the weatherproof housing defines
2 an opening which can be opened by a user for accessing and servicing the components
3 of the system.

1 17. The septic heater system of claim 14 wherein the opening is defined by the
2 weatherproof housing to be a removable roof.

1 18. The septic heater system of claim 1 wherein the heater and fan system
2 comprises an electric heater and an electrically-powered fan having a power connection
3 for coupling the heater and fan system to an electric power source.

1 19. The septic heater system of claim 1 wherein:

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3 the weatherproof housing defines an air intake opening to enable air to enter the
4 housing such that, when the housing is coupled to the access/cleanout pipe, the air
5 entering the housing will flow through the heater and fan system down the
6 access/cleanout pipe down to the septic system;

7
8 the structural member of the weatherproof housing which defines the air intake
9 opening comprises a structure located at the bottom of the housing;

10
11 the heated air output port of the housing is located at the bottom of the housing;
12 and

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14 the system comprises an insulated connector pipe to couple the heated-air
15 output port of the housing to the access/cleanout pipe.

20. A method for preventing a septic system freeze-up wherein the septic system

includes a septic tank, drop boxes, connecting sewer pipe, a drainfield, and one or more vertical access/cleanout pipes which rise from one or more portions of the septic system to access ports at or above ground level, the heater system being adapted for connection to one or more of the vertical access/cleanout pipes, the method comprising

5 blowing a flow of heated air into one or more of the vertical access/cleanout pipes, wherein the flow of heated air flows down the one or more access/cleanout pipes and prevents septic-system freeze-up by delivering the heated air to septic system.